Docket No.: 107262.158

2812

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)

Badri N. KRISHNAMURTHY et al.)
)
) Examiner: Andre' C. Stevenson
Serial No.: 09/928,474)
)
) Art Unit: 2812
Filed: August 14, 2001)
)
For: EXPERIMENT MANAGEMENT SYSTEM, METHOD)
AND MEDIUM)

MailStop PETITION
Commissioner for Patents
U.S. Patent and Trademark Office
2011 South Clark Place
Crystal Plaza Two, Lobby, Room 1B03
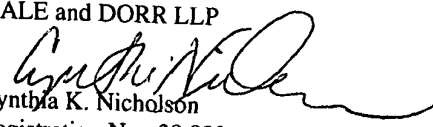Arlington, VA 22202

Dear Sir:

Transmitted herewith is Petition from Requirement for Restriction Under 37 C.F.R. § 1.144 in response to the Office Action mailed April 9, 2003 having a three-month shortened statutory period of response set to expire July 9, 2003.

[X] Please charge my Deposit Account No. 08-0219 in the amount of $130.00 for Petition for Restriction Requirement. An additional copy of this transmittal sheet is submitted herewith.

[X] The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 08-0219, including any filing fees under 37 CFR 1.16 for presentation of extra claims and any patent application processing fees under 37 CFR 1.17.
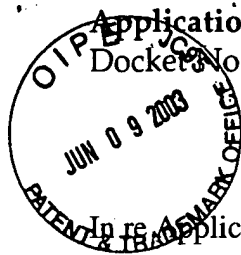
Respectfully submitted,

HALE and DORR LLP

Cynthia K. Nicholson
Registration No. 39,880

1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Telephone: (202) 942-8585
Facsimile : (202) 942-8484
Date: June 9, 2003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of   :

Badri N. KRISHNAMURTHY et al.   :

Serial No. 09/928,474   :   Group Art Unit: 2812

Filed: August 14, 2001   :   Examiner: Andre' C. Stevenson

For: EXPERIMENT MANAGEMENT SYSTEM, METHOD AND MEDIUM

PETITION FROM REQUIREMENT FOR RESTRICTION UNDER 37 C.F.R. § 1.144

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Arlington, VA 22202

Sir:

   Applicants Petition under 37 C.F.R. § 1.144 from the Examiner's Restriction
Requirement dated October 1, 2002, which was treated as final in the Office Action
dated April 9, 2003.

   Applicants respectfully request that this Petition be forwarded to the Group
Director for timely consideration.

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I.   The Restriction Requirement

On October 1, 2002, the Examiner made a three-way restriction requirement to claims 1-27.

On November 20, 2002, Applicants traversed the Examiner's three-way restriction requirement and provisionally elected Examiner's Group I drawn to a method, with traverse. Applicants concurrently submitted a preliminary amendment with new linking claim 28 drawn to an apparatus with means for practicing the process of claim 1.

In the office action dated April 9, 2003, the Examiner failed to further address the traversed restriction requirement and essentially treated it as if it was final by discussing the merits of Group I.[1]

This Petition is timely filed: Applicants requested reconsideration and made a provisional election with traverse. The Examiner then ignored the election with traverse and issued an office action on the merits as if Group I was elected

II.   All the Pending Claims are Related

All the pending claims are related. In particular, pending claims 1-28 all recite a method claim of certain steps, a related computer-implemented system, a related computer-readable medium comprising instructions or a related computer-implemented apparatus with means + function claims.

Applicants' pending claims with respect to the restriction requirement are outlined below. The pending claims, as amended in the Preliminary Amendment filed on November 20, 2002, are attached hereto as Appendix 1.

GROUP I [2]   1. A computer-implemented method for managing experiments relating to automated processing technology, comprising at least the recited steps:

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[1] Where the initial requirement is traversed, the Examiner must reconsider it, and either repeat it and make it final in the next Office Action, or withdraw it. MPEP §§ 803.01, 821.01. The Examiner's failure to follow the regulations amounts to an abuse of discretion.

(A)   receiving *an experiment order, the experiment order including at least some deviation from a base process capable of operating in an automated environment;*

(B)   obtaining *an approval of the experiment order;*

(C)   *translating* and storing *at least a portion of the experiment order* into *processing data suitable for implementation by said automated environment;* and

(D)   causing *the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with said processing data.*

Claims 1-8 and 25   Claims 1 and 25 are independent. Claims 2-8 depend directly or indirectly from claim 1.

GROUP II   9. A computer-implemented system for managing experiments relating to automated processing technology:

(A)   *an experiment order, the experiment order including at least some deviation from a base process capable of operating in an automated environment;*

(B)   *an approval of the experiment order,* obtained in response to receipt of the experiment order;

(C)   *processing data suitable for implementation by said automated environment, translated* from *at least a portion of the experiment order;* and

(D)   wherein said automated environment causes *the experiment to be executed in conjunction with at least some portion of said base process by the automated environment, in accordance with the processing data.*

Claims 9-16 and 26   Claims 9 and 26 are independent. Claims 10-16 depend directly or indirectly from claim 9.

GROUP III   17. A computer-readable medium comprising instructions being executed by a computer, the instructions including a computer-implemented method for managing experiments relating to automated processing technology, the instructions for implementing the steps of:

---

[2] Identical language in claim 1 of Group I and claim 9 of Group II are in bold and italicized, for convenient reference. The language of claim 17 of Group III is identical to that shown for Group I and is therefore omitted for convenience.

                     (A)-(D) are identical to GROUP I above.

Claims 17-24   Claims 17 and 27 are independent; claims 18-24 depend directly or
and 27   indirectly from claim 17.

NEW CLAIM 28

Claim 28   Claim 28 is a linking claim and is independent, but is not addressed
                      in the Office Action dated April 9, 2003.

III.   Restriction is Not Proper When the Claims are Related

As stated in MPEP §808.02, "[w]here, as disclosed in the application, the several

inventions claimed are related, and such related inventions are not patentably distinct

as claimed, restriction under 35 U. S. C. § 121 is never proper (MPEP §806.05)." As

indicated above, since the claimed inventions are related, restriction in the instant

application is not proper.

In addition, and as stated in Applicants' earlier traversal, the restriction is

improper since; (1) reasonable examples of material differences were not provided; (2)

there appears to be no serious burden on the Examiner necessitating the restriction

requirement; and (3) the application, as amended, includes a linking claim, thereby

rendering the restriction improper.

Regarding (1) above, the Examiner cited MPEP § 806.05(e), which states that

inventions are distinct if it "can be shown: (A) the process as claimed can be practiced

by another materially different apparatus or by hand; or (B) that the apparatus as

claimed can be used to practice another and materially different process." The

Examiner then appeared to indicate that the latter of these two (i.e., "(B)") was

applicable to the present application. However, it was not made clear by the Examiner

why this would be the case. In particular, no examples were provided by the Examiner,

in contravention of the underline examples of material differences required by MPEP § 806.05(e).

Specifically, § 806.05(e) states that "the burden is on the examiner to provide reasonable

examples that recite material differences." *Id.* Applicants respectfully requested that

the Examiner provide such examples if the restriction requirement was maintained. No

examples were provided.

Regarding (2) above, the Restriction Requirement of October 1, 2002, cited

class/subclass combinations to search:

> Group I: 380/277 (Cryptography key management)[3]
>
> Group II: 700/1 (control systems)
>
> Group III: 206/710 (special receptacle or package for a semi-conductor

wafer)

It is believed that the search for Group II is not well taken as a material

difference, since all of the three restriction groups relate to control systems. Hence, it

was respectfully submitted that class/subclass 700/1 should be searched for all three

restriction groups. Moreover, claims 1-28 are related (as indicated in the section above)

such that a search of the prior art for the method of Group I would encompass the

system of Group II and the computer readable medium of Group III. Consequently,

there appears to be no serious burden on the Examiner necessitating the restriction

---

[3] It is not apparent why class/subclass 380/277, directed to cryptography key management, is relevant to
the claimed invention of Group I. The Examiner was respectfully requested to clarify, although no
clarification was provided. The field of search must, in fact, be pertinent to the type of subject matter
covered by the claims of Group I and not for Group II or III or the linking claim.

requirement, as would be required as indicated in the introductory paragraphs of

MPEP § 803.

Lastly, regarding (3) above, Applicant submitted a Preliminary Amendment on

November 20, 2002, including a linking claim (new claim 28) of the type indicated by

MPEP § 806.05(e). The Office Action of April 9, 2003 failed to indicate the treatment of

claim 28, or even if it is a pending claim. This is an apparatus claim including a claim to

"means" for practicing the process. "The claim is a linking claim and must be examined

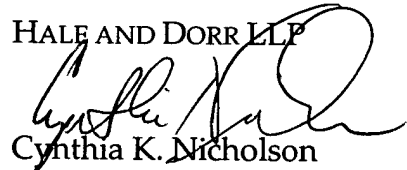with the elected invention." Id.

In summary, it is respectfully submitted that the Examiner failed to meet the

preliminary burden of showing that the restriction requirement is proper. Moreover, it

is respectfully submitted that Applicants have overcome any presumption made by the

Examiner's preliminary conclusions.

V.   Conclusion

Applicants respectfully request that the restriction requirement be withdrawn,

and that claims 1-28 be examined together in the present application.

Respectfully submitted

HALE AND DORR LLP

Cynthia K. Nicholson
Registration No. 36,880

1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
TEL: 202.942.8482
FAX: 202.942.8484
Date: June 9, 2003

APPENDIX 1: PENDING CLAIMS

1   1.   A computer-implemented method for managing experiments relating to

2   automated processing technology, comprising the steps of:

3   (A)   receiving an experiment order, the experiment order including at least

4   some deviation from a base process capable of operating in an automated environment;

5   (B)   obtaining an approval of the experiment order;

6   (C)   translating and storing at least a portion of the experiment order into

7   processing data suitable for implementation by said automated environment; and

8   (D)   causing the experiment to be executed in conjunction with at least some

9   portion of said base process by the automated environment, in accordance with said

10   processing data.

1   2.   The method of claim 1, wherein the obtaining step further includes the steps of

2   storing data defining the experiment order, distributing the experiment order to a

3   plurality of users, obtaining changes to the experiment order from at least one of the

4   users, and receiving the approval for the experiment order from at least one user.

1   3.   The method of claim 1, further comprising the step of attaching documents to the

2   experiment request.

1   4.   The method of claim 1, further comprising the step of publishing information

2   indicating a state change of the experiment request, responsive to a document attached

3   to the experiment request or to a change in state of the experiment order.

1   5.   The method of claim 1, wherein the translating step further includes the step of

2   receiving the processing data.

1   6.   The method of claim 5, wherein:

2   the experiment produces at least one test product and at least one production

3   product; and

4   wherein the processing data includes an indication of the base process, the

5   changes to the base process, and a split-off of a control set; and

6   wherein the split-off of a control set produces the at least one production product

7   according to the base process and the changes to the base process produce the at least

8   one test product.

1   7.   The method of claim 1, further comprising the step of receiving and storing the

2   results of the execution of the experiment.

1   8.   The method of claim 1, wherein the automated environment produces

2   semiconductor technology.

1   9.   A computer-implemented system for managing experiments relating to

2   automated processing technology, comprising:

3   (A)   an experiment order, the experiment order including at least some

4   deviation from a base process capable of operating in an automated environment;

5   (B)   an approval of the experiment order, obtained in response to receipt of the

6   experiment order;

7   (C)   processing data suitable for implementation by said automated

8   environment, translated from at least a portion of the experiment order; and

9   (D)   wherein said automated environment causes the experiment to be

10   executed in conjunction with at least some portion of said base process by the

11   automated environment, in accordance with the processing data.

1   10.   The system of claim 9, wherein the approval further includes stored data

2   defining the experiment order, a distribution of the experiment order to a plurality of

3   users, stored changes to the experiment order from at least one of the users, and

4   received approval for the experiment order from at least one user.

1   11.   The system of claim 9, further comprising at least one document attached to the

2   experiment request.

1   12.   The system of claim 9, further comprising information indicating a state change

2   of the experiment request, published responsive to a document attached to the

3   experiment request or to a change in state of the experiment order.

1   13.   The system of claim 9, wherein the processing data is received from a user.

1   14.   The system of claim 13, wherein:

2   the experiment produces at least one test product and at least one production

3   product; and

4   wherein the processing data includes an indication of the base process, the

5   changes to the base process, and a split-off of a control set; and

6   wherein the split-off of a control set produces the at least one production product

7   according to the base process and the changes to the base process produce the at least

8   one test product.

1   15.   The system of claim 9, wherein the results of the execution of the experiment are

2   received and stored.

1   16.   The system of claim 9, wherein the automated environment produces

2   semiconductor technology.

1   17.   A computer-readable medium comprising instructions being executed by a

2   computer, the instructions including a computer-implemented method for managing

3   experiments relating to automated processing technology, the instructions for

4   implementing the steps of:

5   (A)   receiving an experiment order, the experiment order including at least

6   some deviation from a base process capable of operating in an automated environment;

7   (B)   obtaining an approval of the experiment order;

8   (C)   translating and storing at least a portion of the experiment order into

9   processing data suitable for implementation by said automated environment; and

10   (D)   causing the experiment to be executed in conjunction with at least some

11   portion of said base process by the automated environment in accordance with the

12   processing data.

1   18.   The medium of claim 17, wherein the obtaining step further includes the steps of

2   storing data defining the experiment order, distributing the experiment order to a

3   plurality of users, obtaining changes to the experiment order from at least one of the

4   users, and receiving the approval for the experiment order from at least one user.

1   19.   The medium of claim 17, wherein the computer program further comprises the

2   step of attaching documents to the experiment request.

1   20.   The medium of claim 17, wherein the computer program further comprises the

2   step of publishing information indicating a state change of the experiment request,

3   responsive to a document attached to the experiment request or to a change in state of

4   the experiment order.

1   21.   The medium of claim 17, wherein the translating step further includes the steps

2   of receiving the processing data.

1   22.   The medium of claim 21, wherein:

2   the experiment produces at least one test product and at least one production

3   product; and

4   wherein the processing data includes an indication of the base process, the

5   changes to the base process, and a split-off of a control set; and

6   wherein the split-off of a control set produces the at least one production product

7   according to the base process and the changes to the base process produce the at least

8   one test product.

1   23.   The medium of claim 17, wherein the computer program further comprises the

2   step of receiving and storing the results of the execution of the experiment.

1   24.   The medium of claim 17, wherein the automated environment produces

2   semiconductor technology.

1   25.   A computer-implemented method for managing experiments relating to

2   semiconductor technology, comprising the steps of:

3   (A)   receiving an experiment order, the experiment order including at least

4   some deviation from a base process capable of operating in an automated environment;

5   (B)   obtaining an approval of the experiment order;

6   (C)   translating and storing at least a portion of the experiment order into

7   processing data suitable for implementation by said automated environment; and

8   (D)   causing the experiment to be executed in conjunction with at least some

9   portion of said base process by the automated environment in accordance with the

10   processing data;

11   (E)   wherein the obtaining step further includes the steps of storing data

12   defining the experiment order, distributing the experiment order to a plurality of users,

13   obtaining changes to the experiment order from at least one of the users, and receiving

14   the approval for the experiment order from at least one user;

15   (F)   wherein the experiment produces at least one test product and at least one

16   production product; and wherein the processing data includes an indication of the base

17   process, the changes to the base process, and a split-off of a control set; and wherein the

18   split-off of a control set produces the at least one production product according to the

19   base process and the changes to the base process produce the at least one test product.

1   26.   A computer-implemented system for managing experiments relating to

2   semiconductor technology, comprising:

3   (A)   an experiment order, the experiment order including at least some

4   deviation from a base process capable of operating in an automated environment;

5   (B)   an approval of the experiment order, obtained in response to receipt of the

6   experiment order;

7   (C)   processing data suitable for implementation by said automated

8   environment, translated from at least a portion of the experiment order;

9   (D)   wherein said automated environment causes the experiment to be

10   executed in conjunction with at least some portion of said base process by the

11   automated environment in accordance with the processing data;

12   (E)   wherein the approval further includes stored data defining the experiment

13   order, a distribution of the experiment order to a plurality of users, stored changes to

14   the experiment order from at least one of the users, and received approval for the

15   experiment order from at least one user; and

16   (F)   wherein the experiment produces at least one test product and at least one

17   production product; and wherein the processing data includes an indication of the base

18   process, the changes to the base process, and a split-off of a control set; and wherein the

19   split-off of a control set produces the at least one production product according to the

20   base process and the changes to the base process produce the at least one test product.

1   27.   A computer-readable medium comprising instructions being executed by a

2   computer, the instructions including a computer-implemented method for managing

3   experiments relating to automated processing technology, the instructions for

4   implementing the steps of:

5   (A)   receiving an experiment order, the experiment order including at least

6   some deviation from a base process capable of operating in an automated environment;

7   (B)   obtaining an approval of the experiment order;

8   (C)   translating and storing at least a portion of the experiment order into

9   processing data suitable for implementation by said automated environment; and

10   (D)   causing the experiment to be executed in conjunction with at least some

11   portion of said base process by the automated environment in accordance with the

12   processing data;

13   (E)   wherein the obtaining step further includes the steps of storing data

14   defining the experiment order, distributing the experiment order to a plurality of users,

15   obtaining changes to the experiment order from at least one of the users, and receiving

16   the approval for the experiment order from at least one user;

17   (F)   wherein the experiment produces at least one test product and at least one

18   production product; and wherein the processing data includes an indication of the base

19   process, the changes to the base process, and a split-off of a control set; and wherein the

20   split-off of a control set produces the at least one production product according to the

21   base process and the changes to the base process produce the at least one test product.

1   28.   (New) A computer-implemented apparatus for managing experiments relating to

2   automated processing technology, comprising:

3   (A)   means for receiving an experiment order, the experiment order including

4   at least some deviation from a base process capable of operating in an automated

5   environment;

6   (B)   means for obtaining an approval of the experiment order;

7   (C)   means for translating and storing at least a portion of the experiment

8   order into processing data suitable for implementation by said automated environment;

9   and

10   (D)   means for causing the experiment to be executed in conjunction with at

11   least some portion of said base process by the automated environment, in accordance

12   with said processing data.